UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

SEP 22 2009

REPLY TO THE ATTENTION OF
SE-5J

MEMORANDUM

SUBJECT: ACTION MEMORANDUM - Request for Approval of Funding in the amount of $784,536 for a Time-Critical Removal Action at State Plating Site, Elwood, Madison County, Indiana (Site ID B5SG)

FROM: Anita L. Boseman, On-Scene Coordinator
Emergency Response Section 3

THRU: Linda Nachowicz, Branch Chief
Emergency Response Branch 2

TO: Richard C. Karl, Director
Superfund Division

I. PURPOSE

The purpose of this memorandum is to request and document your approval to expend up to $784,536 to conduct a time-critical removal action at the State Plating Site (the "Site") in Elwood, Madison County, Indiana (latitude 40°16' 58" north and longitude 85°51' 06" west). The proposed response actions are necessary to abate an imminent and substantial threat to public health, welfare and the environment posed by the presence of uncontrolled hazardous substances, pollutants and contaminants at the Site. The United States Environmental Protection Agency ("U.S. EPA") has documented the presence of various metal-plating wastes at the Site in treatment pits, tanks, damaged vats, open and damaged drums, and small containers.

Under the authority of Section 104(a) of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), 42 U.S.C. § 9604(a), and the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), 40 C.F.R. § 300.415(b)(2), the proposed time-critical removal action will abate or eliminate the immediate threat posed to public health, welfare and the environment at the Site. The uncontrolled conditions of the hazardous substances, pollutants and contaminants at the Site, and the Site's close proximity to residences, farms, and local businesses require that this action be classified as a time-critical removal action. The proposed response action will require an estimated 75 working days to complete.

There are no nationally significant or precedent setting issues associated with the Site.

The Site is not on the National Priorities List.

II. SITE CONDITIONS AND BACKGROUND

CERCLIS ID # INN 000 510 359

A. Site Description

1. Physical Location

The Site is located in an urban industrial/residential area at 450 North 9th Street in Elwood, Madison County, Indiana. The geographical coordinates for the Site are latitude 40°16' 58" north and longitude 85°51' 06" west. The Site covers approximately 26 acres and contains one 340,000-square-foot building. The building, which is located in the center of the Site, is composed of 11 sections. Five of the sections, A, B, E, F, and J are used for storage, packaging, and loading; three of the sections, D, H, and K, are used for plating operations; two of the sections, C and I, are used for treatment operations; and one section, G, is used for offices. The Site is bordered to the north by undeveloped land and railroad tracks, to the east by a farm on North 9th Street and a commercial property directly across the street, to the south by North D Street and residential properties, and to the west by North Fifth Street and residential properties. Big Duck Creek flows from north to south less than ½ mile southwest of the Site. According to the Madison County Emergency Management Agency (EMA), there are 2,593 homes, four schools, and one hospital within a 1-mile radius of the Site.

According to the Region 5 Superfund Environmental Justice Analysis, a total population of 5,538 residents lives within a one mile radius of the Site. Approximately 2% of these residents are classified as minority. Approximately 53% of the families residing in this area have an income of less than the established state low income level. To meet the Environmental Justice concern criteria in Indiana, the area within a 1 mile radius of the Site must have a population that is at least 58% low-income and/or 28% minority. Therefore, the demographic conditions do not establish an environmental justice priority for the community around this Site.

2. Site History

In 1983 and 1994, State Plating, Inc. purchased the land parcels comprising the Site from E. Konigslow Stamping and Tool. Co. In 1998, State Plating, Inc. transferred ownership of the Site to State Plating, LLC. In 2004, State Plating, LLC transferred ownership of the Site to Railing Enterprises, LLC. The last known operator of the Site, State Plating ceased operations at the Site on May 2, 2008. The Site is still owned by Railing Enterprises, LLC. Real property taxes for the 2006 and 2007 tax years in the amount of $381,791.32 are unpaid and the property is eligible for tax sale. State Plating conducted nickel, nickel chrome, and dual nickel-chrome plating and polishing of office furniture, wire goods, automatic parts, kitchen hardware, and plumbing fixtures. As a small-quantity generator of hazardous waste, State Plating generated

electroplating sludge designated as D002 and D007 wastes. Since the facility's closure, Railing Enterprises, LLC has conducted salvage operations on many of the plating lines, tanks, and other equipment at the Site.

On June 18, 2009, U.S.EPA On-Scene Coordinator (OSC) Jeffery Crowley and IDEM OSC Jason Sewell observed that the public could easily access the Site. Consequently, the OSCs determined that a recommendation to secure the building at the Site should be made to U.S. EPA management.

On July 8, 2009, U.S. EPA confirmed that the owner of the Site, Railing Enterprises, LLC, had no objection to U.S. EPA's plan to secure the Site. On July 10, 2009, U.S. EPA authorized $40,000 to perform emergency stabilization at the Site which included securing all doors to the building at the Site and the installation of new locks on all exterior gates.

B. Other Actions to Date

1. Removal Site Evaluation

On June 30 and July 1, 2009, U.S. EPA OSCs Jeffrey Crowley and Anita L. Boseman, IDEM OSCs Jason Sewell and Bill Myers, and START Weston members Randy Kirkland, Andy Ravis, and Sean Kane conducted an emergency removal assessment at the Site that included documentation of conditions at the Site, collection of samples for threat analysis, and inventory of the materials stored in the building at the Site. The owner of the Site, Railing Enterprises, LLC, provided verbal access to the Site.

Prior to entering the building and during the assessment of the Site, START performed continuous breathing zone air monitoring using a MultiRAE multi-gas monitor, a Dräger acid test, sulfuric acid tubes, and a ToxiRAE hydrogen cyanide monitor. No air monitoring readings above background levels were recorded in the breathing zone throughout the building at the Site.

More than 25 plating tanks and pits are located throughout the building at the Site. All of the tanks and pits were once used as part of the electroplating process and contained acid solution, plating material, caustic solution, or rinse solution. At the time of the site assessment, it appeared that the tanks and pits had not been used for an extended amount of time. Nearly all of the tanks and pits are uncovered and contain plating waste or a mixture of plating material and rain water. Some of the tanks are elevated. The pits are inset below the floor surface. The areas around several of the tanks and pits are saturated with spilled material. Other observations include:

- Four pits designated as "Treatment Pits" in the northern section of the building are covered with grating for fall protection purposes. However, some grating sections have been removed and are large enough for a human being to fall through and into the stored liquid. According to drawings found during the assessment of the Site, two more pits are located in the southern portion of the building.
- Approximately 250 to 300 fifty-five gallon drums, approximately 300 one gallon polyethylene totes, and many small containers are located throughout the Site.

- Some of the drums and small containers are labeled as either corrosive, oxidizer, caustic, toxic, barium, nickel strip, or chromic strip. Several drums and small containers are uncovered, deteriorated, and/or leaking. Most of the drums and small containers are unlabeled or contain plating waste mixed with general debris.
- Plating tank material, or a mixture of plating tank material and rain water, covers much of the plating area floor. There is no spill control equipment or secondary containment at the Site.
- Several large, unlabeled, and uncovered wooden crates containing solid, powder-like plating material.
- The building at the Site, overall, is in a dilapidated condition and there is a general lack of security and controls. Also, there is evidence that the roof of the building is leaking and rain water is causing some of the plating vats and pits to overflow. Several windows are broken and uncovered, and many personnel and bay doors are unsecured or open.

Sampling locations were selected based on visual observations and on the results of field tests, such as screening container contents for pH, and using a MultiRAE monitor to screen container headspaces for carbon monoxide, volatile organic compounds, hydrogen cyanide vapors, oxygen, and explosive gases. Solid waste grab samples were collected using dedicated, disposable plastic scoops, and placed in laboratory-supplied glass and polypropylene jars. Liquid waste samples were collected using dedicated drum thieves and placed in the laboratory-supplied bottles.

Ten liquid waste and four solid samples (including four duplicates) were collected for waste characterization analyses. After the completion of sampling activities, the sample containers were decontaminated, labeled, and packaged with ice. Samples were transported to TestAmerica Laboratories, Inc, in Dayton, Ohio, for flashpoint, pH, toxicity characteristic leaching procedure ("TCLP") and total cyanide analyses.

Five of the liquid wastes samples were tested for pH. The test results show that two liquids had a pH of 1, one liquid had a pH of 3, one liquid had a pH of 7 and one liquid had a pH of 13. This demonstrates the presence of strong acids and strong bases.

As set forth in 40 C.F.R. § 261.3(a)(2), a solid waste is considered a hazardous waste if it exhibits any of the characteristics of ignitability, corrosivity, toxicity, or reactivity.

The following are laboratory results of solid waste from drums and small containers:

- Samples SP-WL03-070109, SP-WL04-070109, SP-WL06-070109, and SP-WL-Dup3-070109 had pH values of less than 2.0 standard units (SU). According to 40 C.F.R. § 261.22(a)(1), a liquid having a pH value of less than 2.0 SUs exhibits the characteristic of corrosivity. Therefore, these materials are defined as hazardous wastes.

- Sample SP-WL07-070109 showed a pH value of 12.5 SUs. According to 40 C.F.R. § 261.22(a)(1), a liquid having a pH value equal to or greater than 12.5 SUs exhibits the characteristic of corrosivity. Therefore, this material is defined as a

hazardous waste.

- Samples SP-WS01-070109, SP-WL03-070109, SP-WL04-070109, SP-WS02-070109, SP-WL-Dup1-070109, and SP-WL-Dup2-070109 had TCLP chromium concentrations of 4,740; 6,440; 381; 4,709; 64.5; and 29.2 milligrams per liter (mg/L), respectively. According to 40 C.F.R. § 261.24(a), a solid waste exhibits the characteristic of toxicity if the TCLP value exceeds the regulatory limits stated in 40 C.F.R. § 261.24, Table 1. The TCLP regulatory limit for chromium is 5.0 mg/L. Therefore, these materials are defined as hazardous wastes.

The threats present at the Site are numerous. Observations made by U.S. EPA and its contractors on June 30 and July 1, 2009, confirm that there are unsecured hazardous materials and contaminants in large quantities. Sampling results conclude that there are hazardous substances present at the Site. In addition, the roof of the building at the Site appears to leak during rain events. Such rain water appears to be coming into contact with waste materials, causing them to migrate. U.S. EPA is concerned that unsecured hazardous substances, pollutants and/or contaminants, present in a deteriorating building at the Site, could either release to the environment or come into contact with the nearby human population.

C. State and Local Authorities Role

1. State and Local Actions to Date

On June 15, 2009, the Indiana Department of Environmental Management (IDEM) informed U.S. EPA that State Plating ceased its participation in IDEM's Voluntary Remediation Program and requested U.S. EPA's assistance in responding to releases and threatened releases of plating shop chemicals and wastes from the Site. IDEM is concerned that conditions at the Site make the neighborhood unsafe. Similarly, the City of Elwood is concerned about the potential health hazards from the plating shop chemicals and other wastes at the Site. The City is also concerned about the apparent inability of the owner/operator to clean up the Site due to apparent financial constraints.

III. THREATS TO PUBLIC HEALTH, WELFARE, OR THE ENVIRONMENT, AND STATUTORY AND REGULATORY AUTHORITIES

The conditions at the State Plating Site present an imminent and substantial threat to the public health, welfare, and the environment based on the factors set forth in Section 300.415(b)(2) of the National Contingency Plan (NCP), as amended, 40 C.F.R. Part 300. These factors include the following:

i. Actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances or pollutants or contaminants;

Numerous abandoned wastes in drums, tanks, and laboratory containers are located throughout the Site. Incompatible waste streams in close proximity to each other include acids and caustics in drums, tanks, and pits. The Site building is deteriorated with evidence of rain

water entering waste storage and plating line areas.

Results for samples collected during the site assessment indicate corrosive materials in four tanks and a pit (samples SP-WL03-070109, SP-WL04-070109, SP-WL06-070109, SP-WL-Dup3-070109, and SP-WL07-070109).

Sampling results from the Site assessment show that a wooden crate, two tanks, a pit, and a 5-gallon bucket contain materials exhibiting toxic characteristics (samples SP-WS01-070109, SP-WL03-070109, SP-WL04-070109, SP-WS02-070109, SP-WL-Dup1-070109, and SP-WS-Dup2-070109).

As noted above, there are 2,593 homes, four schools, and one hospital within a 1-mile radius of the Site. During the site assessment, it was observed that access to the Site was unrestricted. Accordingly, U.S. EPA restricted access to the Site by securing all entry doors and gates. However, these security measures are temporary and, if compromised, unrestricted access to the Site could result in accidental or intentional release of hazardous materials and reactions that could generate toxic gases. The close proximity of residences and other vulnerable areas immediately surrounding the Site greatly increase the likelihood of human health and environmental impacts, if a release occurs. Furthermore, the unknown and hazardous nature of many of the pits and vats pose potential exposure risks to trespassers and first responders.

The tanks, drums, vats, and pits located inside the building at the Site have no secondary containment and there is evidence of rain water leaking through the roof and into some of the plating tanks, causing them to overflow. Contaminants may flow unimpeded into the street and storm sewer, which discharges directly to Big Duck Creek. Potential exposure could occur through this migration pathway.

Samples SP-WS01-070109, SP-WL03-070109, SP-WL04-070109, SP-WS02-070109, SP-WL-Dup1-070109, and SP-WL-Dup2-070109 show TCLP chromium concentrations of 4,740; 6,440; 381; 4,709; 64.5; and 29.2 milligrams per liter (mg/L), respectively. According to the Agency for Toxic Substances and Disease Registry (ATSDR), hexavalent chromium is a human carcinogen.

ii. Actual or potential contamination of drinking water supplies or sensitive ecosystems;

The location of the tanks, drums, vats and pits with no secondary containment and under a leaking roof, could affect drinking water supplies and sensitive ecosystems. There is documented evidence of rain water leaking through the roof and into some of the plating vats and pits, causing them to overflow. Contaminants may flow unimpeded into surrounding soil, streets and storm sewers which discharge directly to Big Duck Creek. Contaminants that enter Big Duck Creek could impact sensitive ecosystems.

iii. Hazardous substances or pollutants or contaminants in drums, barrels, tanks, or other bulk storage containers that pose a threat of release;

Numerous drums, containers, tanks, vats, and pits are located throughout the building at the Site. Several drums, tanks, vats, pits and small containers are uncovered, deteriorated, and leaking. Further deterioration of the drums and tanks could allow additional quantities of hazardous substances to migrate into the environment. Some drums are labeled as containing hazardous materials (corrosive, oxidizer, caustic, toxic, barium, nickel strip, chromic strip, and hazardous waste).

Unrestricted access to the Site could result in an accidental or intentional release of hazardous materials, contact with hazardous materials, or a reaction that generates toxic gases. The close proximity of the Site to residences and other vulnerable areas greatly increases potential threats to human health and the environment if a release occurs.

v. Weather conditions that may cause hazardous substances, pollutants, or contaminants to migrate or be released;

Central Indiana receives a substantial amount of precipitation with an average yearly rainfall of 40 inches and an average yearly snowfall of 22 inches. There are occasional tornados in this area of Indiana. Weather conditions will continue to contribute to the deterioration of the building at the Site, and precipitation will continue to cause the vats and pits to overflow based on the condition of the building's roof.

vi. Threat of fire or explosion;

Despite the fact that all electrical power and natural gas have been shut off at the Site, there is a moderate threat of fire or explosion due to unrestricted access. As temperatures decrease in autumn and winter, the potential increases for vagrants to enter the building and start fires for warmth.

The potentially hazardous nature of many of the contaminants at the Site increases the potential for fire or explosion. A fire or explosion at the Site could result in an airborne release of hazardous chemicals or a release of chemicals in fire suppression run-off water that could endanger first responders and nearby populations which includes school children. Evacuations may be necessary in the event of a fire, explosion, or a release from the Site. Adjacent properties could be affected as well.

vii. The availability of other appropriate federal and state response mechanisms to respond to the release;

On June 15, 2009, IDEM requested U.S. EPA assistance in performing an emergency removal assessment and potential response action at the Site. The State of Indiana and local agencies do not have sufficient funds to undertake response action activities at the Site.

IV. ENDANGERMENT DETERMINATION

Given the conditions at the Site, the nature of the confirmed hazardous substances, and the potential exposure pathways described in Sections II and III above, actual or threatened releases of hazardous substances from this Site, if not addressed by implementing the response actions selected in this Action Memorandum, present an imminent and substantial endangerment to public health, or welfare, or the environment.

V. PROPOSED ACTIONS AND ESTIMATED COSTS

The OSC proposes to undertake the following actions to mitigate threats posed by the presence of hazardous substances at the Site:

1. Develop and implement a Site Health and Safety Plan, including an Air Monitoring Plan and Site Contingency Plan;

2. Develop and implement a Site Security Plan;

3. Pits, drums, smaller containers, vats, floor sweepings, unknown materials, facility contents, debris, and tanks will be sampled, analyzed, categorized and staged for disposal. Compatible waste streams will be bulked/re-containerized, and appropriately prepared for disposal at off-site disposal facilities;

4. Tanks, piping, debris, drums and other containers will be cleaned as necessary, cut to size and disposed of at off-site disposal facilities;

5. Floors, walls, ceilings, and building components and contents will be cleaned and/or disposed of as reasonably possible to remove contaminated dust and material. These actions will be taken to prevent contaminant migration or cross-contamination of cleaned areas;

6. Characterize, remove and properly dispose of hazardous substances and wastes located at the Site in accordance with U.S. EPA's Off-Site Rule (40 C.F.R. § 300.440).

7. Take any necessary response action to address any release or threatened release of a hazardous substance, pollutant or contaminant that U.S. EPA determines may pose an imminent and substantial endangerment to public health, or welfare, or the environment.

The OSC has initiated planning for provision of post-removal site control consistent with the provisions of 40 C.F.R. § 300.415(l). The nature of this removal action should eliminate the need for any post-removal Site control.

These activities will require an estimated 75 working days to complete.

The detailed cleanup contractor cost is presented in Attachment 1 and estimated project costs are summarized in Attachment 5.

Extramural Costs
Regional Removal Allowance Costs:

Total Clean-up Contractor Costs (including 15% Contingency)	$ 607,206
Other Extramural Costs Not Funded from the Regional Allowance:	
Total START, including multiplier costs	$ 75,000
Subtotal, Extramural Costs	$ 682,206
Extramural Costs Contingency (15% of Subtotal, Extramural Costs)	+ $ 102,330
TOTAL, REMOVAL ACTION PROJECT CEILING	$ 784,536

The response actions described in this memorandum directly address the actual or threatened release at the Site of a hazardous substance, or of a pollutant, or of a contaminant which may pose an imminent and substantial endangerment to public health or welfare or to the environment. These response actions do not impose a burden on affected property disproportionate to the extent to which that property contributes to the conditions being addressed.

Applicable or Relevant and Appropriate Requirements/Off-Site Rule

All applicable, relevant, and appropriate requirements (ARARs) will be complied with to the extent practicable, considering the exigencies of the situation. On September 2, 2009, U.S. EPA sent an E-mail to Harry Atkinson of IDEM requesting that IDEM identify State ARARs. Any State or Federal ARARs identified in a timely manner for this removal action will be complied with to the extent practicable, considering the exigencies of the situation.

All hazardous substances, pollutants or contaminants removed off-site pursuant to this removal action for treatment, storage, and disposal will be treated, stored, or disposed of at a facility in compliance, as determined by U.S. EPA, with the U.S. EPA Off-Site Rule, 40 C.F.R. § 300.440.

VI. EXPECTED CHANGE IN THE SITUATION SHOULD ACTION BE DELAYED OR NO ACTION TAKEN

Delayed or no action will result in increased potential of the toxic and hazardous substances to release, thereby threatening the environment and the health and welfare of nearby residents and other persons who are in close proximity to the Site.

VII. OUTSTANDING POLICY ISSUES

None.

VIII. ENFORCEMENT

For administrative purposes, information concerning the enforcement strategy for this Site is contained in an Enforcement Confidential Addendum (see Attachment 2).

The total EPA costs for this removal action based on full-cost accounting practices that will be eligible for cost recovery are estimated to be $ 1,429,941.

($784,536+100,000) + (61.66% x $884,536) = $ 1,429,941

IX. RECOMMENDATION

This decision document represents the selected removal action for the State Plating Site, located in Elwood, Madison County, Indiana. This document has been developed in accordance with CERCLA, as amended, and is not inconsistent with the NCP. This decision is based on the Administrative Record for the Site (see Attachment 3). Conditions at the Site meet the NCP criteria for a time-critical removal action listed in 40 C.F.R. § 300.415 (b) (2) and I recommend your approval of the proposed removal action. The total estimated project ceiling, if approved, will be $784,536. Of this, an estimated $709,536 may be used for cleanup contractor costs. You may indicate your decision by signing below.

APPROVE: _____ DATE: 9.21.09
Superfund Division Director

DISAPPROVE: _____ DATE: _____
Superfund Division Director

Attachments:
Detailed Cleanup Contractor Estimate
Enforcement Confidential Addendum
Administrative Record Index
Environmental Justice Analysis
Independent Government Cost Estimate

cc: D. Chung, U.S. EPA HQ, 5202-G
(email: David Chung/DC/USEPA/US)
M. Chezik, U.S. Department of Interior, w/o Enf. Addendum
(email:michael_chezik@ios.doi.gov)
Harry Atkinson, IDEM, w/o Enf. Addendum
(e-mail:hatkinso@idem.in.gov)

BCC PAGE

(REDACTED 1 PAGE)

NOT RELEVANT TO THE SELECTION OF THE REMOVAL ACTION

ATTACHMENT 1

DETAILED CLEANUP CONTRACTOR ESTIMATE
STATE PLATING SITE
ELWOOD, MADISON COUNTY, INDIANA
SEPTEMBER 2009

The estimated cleanup contractor costs necessary to complete the removal action at the State Plating Site are as follows:

Personnel and Equipment	$ 319,355
Materials and Miscellaneous	$ 105,650
Analytical	$ 8,000
Transportation and Disposal	$ 95,000
TOTAL	$ 528,005

ATTACHMENT 2

ENFORCEMENT ADDENDUM

STATE PLATING SITE
ELWOOD, MADISON COUNTY, INDIANA

SEPTEMBER 2009

(REDACTED 2 PAGES)

ENFORCEMENT CONFIDENTIAL
NOT SUBJECT TO DISCOVERY

ATTACHMENT 3

U.S. ENVIRONMENTAL PROTECTION AGENCY
REMOVAL ACTION

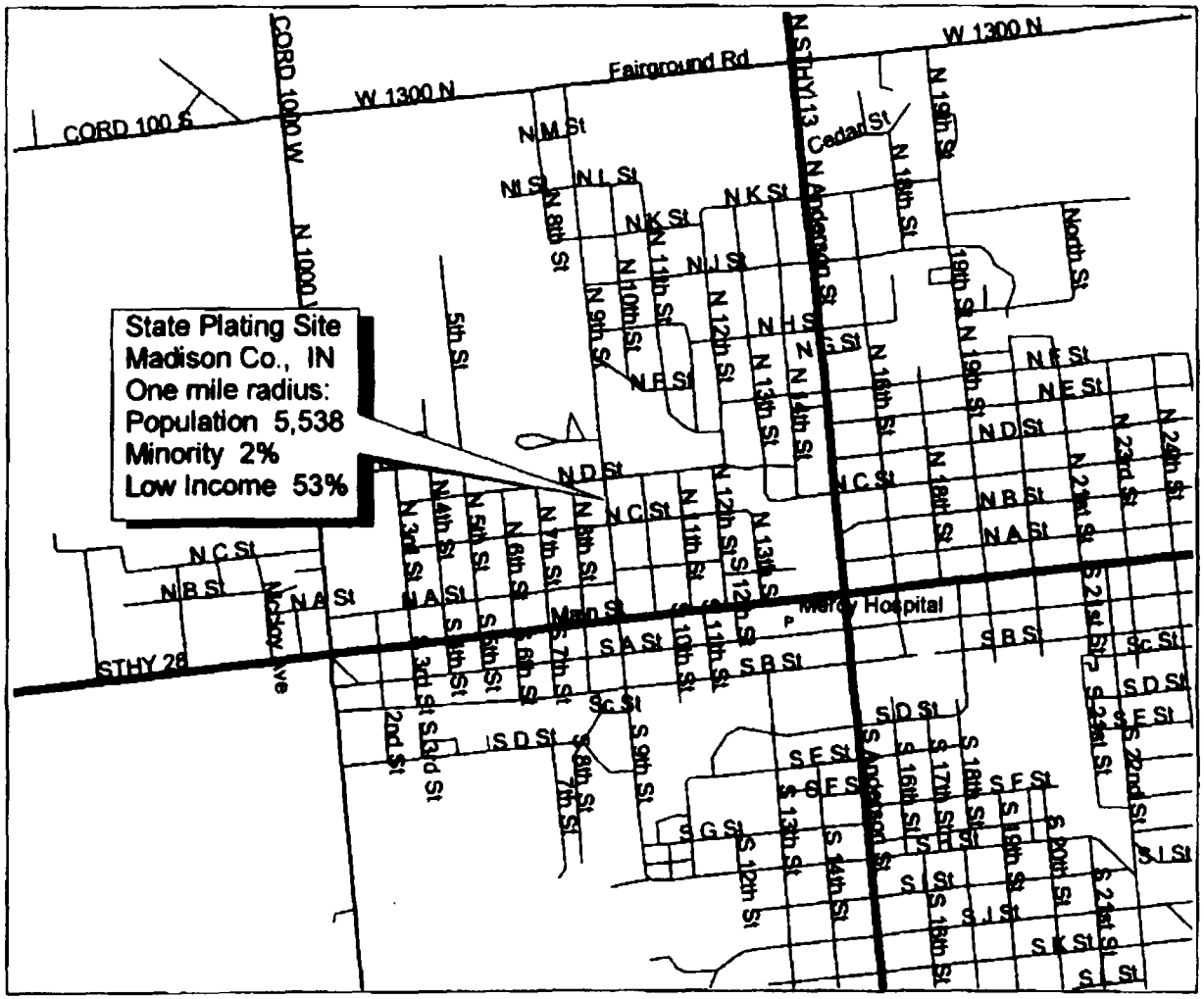
ADMINISTRATIVE RECORD
FOR
STATE PLATING SITE
ELWOOD, MADISON COUNTY, INDIANA

ORIGINAL
SEPTEMBER 4, 2009

NO.	DATE	AUTHOR	RECIPIENT	TITLE/DESCRIPTION	PAGES
1	06/15/09	Atkinson, H., IDEM	Kawecki, J., U.S. EPA	E-Mail Transmission re: the State Plating Site w/ Reply History	1
2	06/19/09	Crowley, J., U.S. EPA	McIntyre, C., U.S. EPA	E-Mail Transmission re: Historical Information for the State Plating Site	1
3	08/07/09	Weston Solutions, Inc.	U.S. EPA	Title Search Report for the State Plating Site	114
4	08/07/09	Weston Solutions, Inc.	U.S. EPA	Site Assessment Report for the State Plating Site	49
5	09/02/09	Boseman, A., U.S. EPA	Atkinson, H., IDEM	E-Mail Transmission re: U.S. EPA Request for State ARARs for the State Plating Site w/ Attachment	2
6	00/00/00	Boseman, A., U.S. EPA	Karl, R., U.S. EPA	Action Memorandum: Request for Approval of Funding in the Amount of $784,536 for an Emergency Removal Action at the State Plating Site **(PENDING)**	

Region 5 Superfund EJ Analysis

State Plating Site Elwood, IN



State of Indiana averages:
Minority: 14%
Low Income: 29%

U.S. EPA Region 5
Environmental Justice Case Criteria
for State of Indiana

Minority: 28% or greater

Low Income: 58% or greater

Date of Map: 8/10/09

Source of Map: Census 2000 Database/ ArcView 3.0

ATTACHMENT 5

INDEPENDENT GOVERNMENT COST ESTIMATE

STATE PLATING SITE
ELWOOD, MADISON COUNTY, INDIANA

SEPTEMBER 2009

(REDACTED 1 PAGE)

NOT RELEVANT TO THE SELECTION OF THE REMOVAL ACTION